

REMARKS

Claims 9, 11-13, 15-32, 35, 37, 38, 40, 41, 43-58, 64, 66-71, 82-87, 89-108, 171, and 172 are pending in the Application. Claims 32, 35, 37, 38, 40, 41, 43-48, 50-58, 69-71, and 172 were indicated as allowed and claims 9, 11-13, 15-31, 49, 64, 66-68, 82-87, 89-108, and 171 were rejected in the Office action mailed June 11, 2009. The Advisory Action mailed September 3, 2009 maintained the rejection of claims 9, 11-13, 15-31, 49, 64, 66-68, 82-87, 89-108, and 171 under 35 U.S.C. §112, second paragraph, and did not enter the amendments of the August 11, 2009 response.

Claims 9, 32, 82, 171, and 172 are independent claims. Claims 9, 49, 82, and 171 are amended by this response. Claims 11-13, 15-31, 64, 66, 67, and 68, claims 35, 37, 38, 40, 41, 43-58, 69, 70, and 71, and claims 83-87 and 89-108 depend, respectively, from independent claims 9, 32, and 82.

As an initial matter, Applicants have corrected the language of claim 98 to remove legacy amendment marks that were inadvertently left in claim 98 following the response filed June 8, 2006. Applicants respectfully submit that no new matter is added by this correction. Applicants apologize for the oversight.

The Applicants note that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is **essential** that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, USPTO personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, USPTO personnel should indicate how rejections may be overcome and how problems may be resolved. **A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.**

M.P.E.P. § 2106(II) (emphasis added).

As such, the Applicants assume, based on the goals of patent examination noted above, that the current Office Action sets forth “all reasons and bases” for rejecting the claims.

Applicants respectfully request reconsideration of the claim rejections, in light of the following remarks.

Telephone Interview

Applicants’ representative Kevin Borg expresses appreciation to Examiner Alexander Jamal for the opportunity to discuss claims 9, 49, 82, and 171 during a telephone call to the Examiner that occurred on November 10, 2009. The language of claims 9, 49, 82, and 171 has been amended to reflect language agreed upon by Mr. Borg and Examiner Jamal that was acceptable to the Examiner. Examiner Jamal agreed that he would contact Mr. Borg to resolve any issues found during examination of the agreed upon amended claim language shown above.

Rejections under 35 U.S.C. §112

Claims 9, 49, 82, and 171 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse the rejection.

The Office states, at page 2 of the June 11, 2009 Office action, “...The claims each recite the phrase ‘about’ when describing various values using by the claimed device. It is not clear from the specification exactly what range of values could be used in each case in order to get the desired results. For the purpose of examination, the examiner assumes all of the about phrases were removed.” The Office action of June 11, 2009 also states, in part at page 3, “The claims rejected under the 112 rejection would be allowable if the phrase ‘about’ was removed from the independent claims.” Applicants express appreciation for the suggested change to the language of the rejected claims to place the claims in condition for allowance.

The Office action of June 11, 2009 further states, at page 3, “[as per applicant's argument that the ‘about’ 10 db term is clearly as per the specification, the examiner disagrees. Applicant's specification does not provide all of the specific implementation details and values used. One skilled in the art would not be able to discern what range/tolerance of values would fall under ‘about 10 dB[.]’ from applicant's specification.”

With regard to independent claim 9, Applicants respectfully submit that claim 9 has been amended so that it now recites, in part, “...wherein the echo is canceled from the near end signal when the power level of the far end signal minus the echo return loss is greater than both a threshold of hearing and the power level for the noise minus **an amount in the range of 8-12 dB.**”

Applicants respectfully submit that the language of claim 9 is supported by the Specification at, for example, Fig. 7 and page 21, line 5 to page 29, line 8. More specifically, the Specification states, at page 27, lines 3-6, in part, “...if the maximum power level (P_{refmax}) of the reference signal minus the estimated ERL is less than the maximum of either the threshold of hearing, or background power level B_{err} of the error signal minus a predetermined threshold ($P_{\text{refmax}} - \text{ERL} < \text{threshold of hearing or } (B_{\text{err}} - \text{threshold})$) neither echo cancellation or non-linear processing are invoked.” This portion of the disclosure states when echo cancellation is not performed. The Specification identifies the term “reference signal” as “reference signal 126(b)”, which is the “voice decoder output signal 120(b)” [the “far end signal”, as opposed to the “near-end signal 122(b)”] after it has been compressed and expanded, for the reasons explained at page 21, lines 18-23. The Specification, at page 26, lines 13-14, identifies the variable B_{err} as the “estimated energy level of the background noise of the error signal (B_{err})”. Applicants respectfully submit that the Specification further states, at page 27, line 12, “The threshold is preferably in the range of about 8-12 dB.” Restating the language of the claim, substituting the terms used in the Specification, we arrive at “...wherein the echo is canceled from the near end signal when the power level of the far end [reference] signal minus the echo return loss is greater than both a threshold of hearing and the power level for the noise [B_{err}] minus [a predetermined threshold of] about 8-12 dB....” Applicants respectfully maintain that while the Specification describes when cancellation is not performed, the claim was simply

drafted to recite the condition when echo cancellation is performed, by reversing the sense of the inequality and changing the logical operation “or” to “and”.

Applicants have amended the portion of claim 9 that previously read “about 10 dB” so that it now reads “an amount in the range of 8-12 dB.” Applicants have shown above that a “range of about 8-12 dB” is taught by the Specification at page 27, line 12. Applicants respectfully submit that one of ordinary skill in the relevant art would be able to discern what values fall within “an amount in the range of 8-12 dB,” as now recited by amended claim 9, and therefore what range of values could be used in order to achieve the desired results. Applicants respectfully submit that claim 9 as now amended is both clear and definite. Accordingly, Applicants respectfully request that the rejection of claim 9 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

With regard to claim 82, Applicants respectfully submit that claim 82 is rejected for the same reason as claim 9. Accordingly, Applicants have amended claim 82 in a fashion similar to the amendment of claim 9. Accordingly, Applicants respectfully submit that claim 82 is allowable for at least the reasons set forth above with regard to the rejection of claim 9, and respectfully request that the rejection of claim 82 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

With regard to claims 49 and 171, Applicants have amended claims 49 and 171 as shown above to eliminate the use of the word “about” in the language of claim 49 that previously recited “about 1/8”, so that it now recites “1/8”, and have eliminated the use of the word “about” in the language of claim 171 that previously recited “about 23-33 dB”, so that it now recites “23-33 dB”, as suggested by the Office. Applicants respectfully submit that claims 49 and 171 as amended are clear and definite, are in compliance with 35 U.S.C. §112, second paragraph, and respectfully request that the rejection of claims 49 and 171 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

CONCLUSION

In general, the Office Action makes various statements regarding the claims and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

Applicants believe that all of pending claims 9, 11-13, 15-32, 35, 37, 38, 40, 41, 43-58, 64, 66-71, 82-87, 89-108, 171, and 172 are in condition for allowance.

Applicants respectfully request, should the Examiner disagree or have any questions regarding this submission, that the Examiner telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any fees required by this submission to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

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